

FLOW METER AND RELATED METHOD**CROSS REFERENCE TO RELATED APPLICATIONS**

[0001] The present application is a Continuation Application of U.S. patent application Ser. No. 15/943,238, filed Apr. 2, 2018 and entitled Flow Meter, now U.S. Publication No. US-2018-0224012-A1, published Aug. 9, 2018, (Attorney Docket No. V93), which is a Continuation Application of U.S. patent application Ser. No. 15/785,926, filed Oct. 17, 2017 and entitled Flow Meter, now U.S. Pat. No. 9,976,665, issued May 22, 2018, (Attorney Docket No. V92), which is a Continuation Application of U.S. patent application Ser. No. 15/672,994, filed Aug. 9, 2017 and entitled System, Method, and Apparatus for Monitoring, Regulating, or Controlling Fluid flow, now U.S. Pat. No. 9,856,990, issued Jan. 2, 2018, (Attorney Docket No. V60), which is a Continuation Application of U.S. patent application Ser. No. 14/939,015, filed Nov. 12, 2015 and entitled Flow Metering Using a Difference Image for Liquid Parameter Estimation, now U.S. Pat. No. 9,772,044, issued Sep. 26, 2017 (Attorney Docket No. Q88), which is a continuation application of U.S. patent application Ser. No. 14/213,373, filed on Mar. 14, 2014, entitled System, Method, and Apparatus for Monitoring, Regulating, or Controlling Fluid Flow, now U.S. Pat. No. 9,435,455, issued Sep. 6, 2016 (Attorney Docket No. L83), which is a Non-Provisional application which claims the benefit of U.S. Provisional Patent Application Ser. No. 61/900,431, filed Nov. 6, 2013 and entitled System, Method, and Apparatus for Monitoring, Regulating, or Controlling Fluid Flow (Attorney Docket No. K52), which is hereby incorporated herein by reference in its entirety.

[0002] U.S. patent application Ser. No. 14/213,373, filed on Mar. 14, 2014, entitled System, Method, and Apparatus for Monitoring, Regulating, or Controlling Fluid Flow, now U.S. Pat. No. 9,435,455, issued Sep. 6, 2016 (Attorney Docket No. L83), which is also a Continuation-In-Part of U.S. patent application Ser. No. 13/834,030, filed Mar. 15, 2013, and entitled System, Method, and Apparatus for Monitoring, Regulating, or Controlling Fluid Flow, now U.S. Pat. No. 9,372,486, issued Jun. 21, 2016 (Attorney Docket No. K28), which claims priority to and the benefit of the following:

[0003] U.S. Provisional Patent Application Ser. No. 61/679,117, filed Aug. 3, 2012 and entitled System, Method, and Apparatus for Monitoring, Regulating, or Controlling Fluid Flow (Attorney Docket No. J30); and

[0004] U.S. Provisional Patent Application Ser. No. 61/651,322, filed May 24, 2012 and entitled System, Method, and Apparatus for Electronic Patient Care (Attorney Docket No. J46), both of which are hereby incorporated herein by reference in their entireties.

[0005] U.S. patent application Ser. No. 13/834,030, filed Mar. 15, 2013, and entitled System, Method, and Apparatus for Monitoring, Regulating, or Controlling Fluid Flow, now U.S. Pat. No. 9,372,486, issued Jun. 21, 2016 (Attorney Docket No. K28), claims priority to and is also a Continuation-In-Part application of the following:

[0006] U.S. patent application Ser. No. 13/333,574, filed Dec. 21, 2011 and entitled System, Method, and Apparatus for Electronic Patient Care, now U.S. Publication No. US-2012-0185267-A1, published Jul. 19, 2012 (Attorney Docket No. 197), and

[0007] PCT Application Serial No. PCT/US11/66588, filed Dec. 21, 2011 and entitled System, Method, and Apparatus for Electronic Patient Care, now PCT Publication No. WO 2013/095459, published Sep. 12, 2013 (Attorney Docket No. 197WO), both of which are hereby incorporated herein by reference in their entireties.

[0008] U.S. patent application Ser. No. 13/834,030, filed Mar. 15, 2013, and entitled System, Method, and Apparatus for Monitoring, Regulating, or Controlling Fluid Flow, now U.S. Pat. No. 9,372,486, issued Jun. 21, 2016 (Attorney Docket No. K28), claims priority to and is also a Continuation-in-Part application of U.S. patent application Ser. No. 13/723,238, filed Dec. 21, 2012 and entitled System, Method, and Apparatus for Clamping, now U.S. Pat. No. 9,759,369, issued Sep. 12, 2017 (Attorney Docket No. J47), which claims priority to and the benefit of the following:

[0009] U.S. Provisional Patent Application Ser. No. 61/578,649, filed Dec. 21, 2011 and entitled System, Method, and Apparatus for Infusing Fluid (Attorney Docket No. J02);

[0010] U.S. Provisional Patent Application Ser. No. 61/578,658, filed Dec. 21, 2011 and entitled System, Method, and Apparatus for Estimating Liquid Delivery (Attorney Docket No. J04);

[0011] U.S. Provisional Patent Application Ser. No. 61/578,674, filed Dec. 21, 2011 and entitled System, Method, and Apparatus for Dispensing Oral Medications (Attorney Docket No. J05);

[0012] U.S. Provisional Patent Application Ser. No. 61/679,117, filed Aug. 3, 2012 and entitled System, Method, and Apparatus for Monitoring, Regulating, or Controlling Fluid Flow (Attorney Docket No. J30); and

[0013] U.S. Provisional Patent Application Ser. No. 61/651,322, filed May 24, 2012 and entitled System, Method, and Apparatus for Electronic Patient Care (Attorney Docket No. J46), each of which is hereby incorporated herein by reference in its entirety.

[0014] U.S. patent application Ser. No. 13/723,238 (Attorney Docket J47) claims priority to and is a Continuation-In-Part application of the following:

[0015] U.S. patent application Ser. No. 13/333,574, filed Dec. 21, 2011 and entitled System, Method, and Apparatus for Electronic Patient Care, now U.S. Publication No. US-2012-0185267-A1, published Jul. 19, 2012 (Attorney Docket No. 197), and

[0016] PCT Application Serial No. PCT/US11/66588, filed Dec. 21, 2011 and entitled System, Method, and Apparatus for Electronic Patient Care, now PCT Publication No. WO 2013/095459, published Sep. 12, 2013 (Attorney Docket No. 197WO), both of which are hereby incorporated herein by reference in their entireties.

[0017] U.S. patent application Ser. No. 13/834,030, filed Mar. 15, 2013, and entitled System, Method, and Apparatus for Monitoring, Regulating, or Controlling Fluid Flow, now U.S. Pat. No. 9,372,486, issued Jun. 21, 2016 (Attorney Docket No. K28), claims priority to and is also a Continuation-in-Part application of U.S. patent application Ser. No. 13/723,235, filed Dec. 21, 2012 and entitled System, Method, and Apparatus for Dispensing Oral Medications, now U.S. Pat. No. 9,400,843, issued Jul. 26, 2016 (Attorney Docket No. J74), which claims priority to and benefit of the following: